

LONDON MATHEMATICAL SOCIETY

De Morgan House, 57-58 Russell Square, London WC1B 4HS

Telephone: 020 7637 3686 Fax: 020 7323 3655 Email: robinson@lms.ac.uk

Chair of Education Committee
Professor C.J. Budd

Administrative Officer
Isabelle Robinson

Response to the QCA Secondary Curriculum Review

The London Mathematical Society is the UK's leading learned society for the promotion of mathematical knowledge. The Society's Education Committee has carefully considered the QCA Secondary Curriculum Review. It welcomes the aim of allowing greater flexibility to the curriculum as well as the importance of placing key mathematical skills in the context of the overall curriculum aims across all subjects. However, it has a number of concerns with various key areas of the drafting of the new Programmes of Study which mean that it cannot support these proposals in their current form.

First, the proposed range of the mathematical content is considerably lacking in detail (although it does have the merit of being a succinct summary of the curriculum). This should be placed in the context of the carefully worded existing content of the programme of study as outlined in the National Curriculum, which is supported by a broad cross-section of the mathematics teaching community. The problem with the lack of detail is that it will lead to considerable ambiguities in the way that this material is interpreted by examination boards. As such examinations have a very significant impact on the way that mathematics is taught at schools, we can see significant problems with the existing level of detail. This may lead to important areas of mathematics not being taught at KS 3-4. The document should ideally either include the detail that is present in the National Curriculum or make it clear to examination boards that the existing National Curriculum should be used as a point of reference. There is also a distinct lack of vision about the modern ways that mathematics is developing, its relevance to the modern world, and the way that data and ICT form an essential part of the ways that it is taught and practised. This detailed list of content is essential if the new programme of study is to work, and we see the drafting of such as an area in which LMS (and the broader mathematical community) and QCA could work together effectively.

Second, we find the timing of this document to be rather strange, given the large-scale changes which will inevitably arise following the introduction of the two Maths GCSEs, the diplomas and the use of functional mathematics. Would it not be more appropriate to consider a programme of study at a later stage in the context of these developments when the link between the programme of study and the new methods of assessment can be made much clearer?

Third, whilst the overall aims of producing successful learners etc. are laudable, we must not lose sight of the special role that mathematics plays in the broader curriculum. The issue here is that mathematics underpins a huge number of other subjects and that the same piece of abstract mathematics will occur in a number of different contexts. It is thus vital that mathematics should continue to be taught as a subject in its own right, as a coherent body of knowledge, that can then be applied in many other areas, rather than being fragmented by being taught only in the context of other subjects (probably by teachers with little or no expertise in mathematics).

The LMS Education Committee is fully supportive of the work of ACME in its discussions about the proposed programme of study and would like to endorse the recommendations of ACME on this. We hope that QCA will collaborate closely with ACME and the mathematical societies to redraft the existing plans for the programmes of study along the lines outlined above. The London Mathematical Society will play its part in that.

Professor Chris Budd
Education Secretary
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